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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,522	02/13/2007	Toshiaki Fujisato	292147US26PCT	9480
22850	7590	12/30/2009		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER CROWELL, ANNA M	
			ART UNIT	PAPER NUMBER
			1792	
			NOTIFICATION DATE	DELIVERY MODE
			12/30/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/581,522	<b>Applicant(s)</b> FUJISATO, TOSHIKI	
	<b>Examiner</b> Michelle Crowell	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>August 31, 2006</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Species II-Figure 5 (claims 1-3 and 5-6) in the reply filed on December 16, 2009 is acknowledged.
2. Claims 4 and 7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirose et al. (J.P. 08-148295).

Referring to Drawings 1 and 5 and paragraphs [0019]-[0028], [0030], and [0039]-[0045], Hirose et al. discloses a plasma processing apparatus for applying a plasma process to a process target, comprising: a process chamber 2 for applying a plasma process to said process target W; a mounting table 5, provided in said process chamber, for mounting thereon said process target W; a process gas supply unit 30 for supplying a process gas for applying the plasma process to said process target W into said process chamber 2; a plasma generation unit 21,5 for generating plasma of the process gas supplied by said process gas supply unit 30 by applying a high-frequency voltage; and a dike 51, 71 for confining the plasma generated by said plasma

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generation unit in an area above said process target W mounted on said mounting table 5, wherein said dike 51, 71 comprises a conductive member formed of a conductor (aluminum), and said conductive member is grounded.

With respect to claim 2, the plasma processing apparatus of Hirose et al. further includes wherein said dike 51, 71 comprises an insulating member (alumite) which covers said conductive member (aluminum) and electrically insulates between said conductive member and said mounting table (par.[0027]-[0028]).

With respect to claim 3, the plasma processing apparatus of Hirose et al. further includes, wherein said dike 71 comprises a protruding portion which is formed to be higher than said process target mounted on said mounting table 5, so as to surround the area above said process target (Drawing 5).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (J.P. 08-148295) in view of Miyoshi et al. (U.S. 5,660,673).

The teachings of Hirose et al. have been discussed above.

Hirose et al. fail to teach a lifting unit for lifting up or down the dike.

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7. Referring to Figure 4b and column 5, lines 22-60, Miyoshi teaches a plasma processing apparatus wherein a lifting unit 11 for lifting up or down the dike is used in order to ensure the uniformity in processing. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dike of Hirose et al. to have a lifting unit for lifting up or down the dike is used in order to ensure the uniformity in processing.

8. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose et al. (J.P. 08-148295) in view of Koshimizu (U.S. 6,000,360).

The teachings of Hirose et al. have been discussed above.

Hirose et al. fail to teach a lifting unit for lifting up or down the dike and the mounting table.

Referring to Figure 5 and column 4, lines 10-22, Koshimizu teaches a plasma processing apparatus wherein a lifting unit 114 for lifting up or down the dike 122 and a mounting table 110 in order to ensure the uniformity in processing. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dike of Hirose et al. to have a lifting unit for lifting up or down the dike and a mounting table in order to ensure the uniformity in processing.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Benzing et al.'523, Tomoyasu et al.'380, Imafuku et al.'518, and Nakaguma et al.'055 teach dikes for plasma confinement.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Crowell whose telephone number is (571)272-1432.

The examiner can normally be reached on M-Th (9:30 -6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Parviz Hassanzadeh/  
Supervisory Patent Examiner, Art Unit 1792

/Michelle Crowell/  
Examiner, Art Unit 1792